B1 cont wherein the peelable support is removed either before step (b), (c) or (d) and wherein steps (a) to (d) are performed within a period of less than 2 months.

REMARKS

The Pending Claims

Claims 20-38, directed to a method for on-site preparation of a relief image, are pending currently. Reconsideration of the pending claims is respectfully requested.

The Amendments to the Claims

Claim 20 has been amended to correct an obvious grammatical error and an obvious typographical error. No new matter has been added by way of these amendments. Separate documents setting forth (a) the precise changes to the claims, as well as (b) the text of all of the pending claims, are enclosed herewith.

Summary of Office Action

The Office Action rejects claims 20, 21, 27-33, and 35-37 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent 5,262,275 (hereinafter "Fan"). Moreover, the Office Action rejects claims 22-26 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fan as applied to claim 20 in view of U.S. Patent 5,888,712 (hereinafter "Lelental et al."). The Office Action also rejects claims 34 and 38 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fan as applied to claim 20 in view of U.S. Patent 4,555,471 (hereinafter "Barzynski et al.").

Discussion of the Anticipation Rejection

The anticipation rejection of claims 20, 21, 27-33, and 35-37 is not believed to be proper inasmuch as the cited reference (i.e., Fan) does not disclose nor reasonably suggest the present invention as recited in the pending claims.

Fan describes a photosensitive printing element that comprises, in order, (a) a support, (b) a photopolymerizable layer, (c) at least one barrier layer, and (d) a layer of infrared radiation sensitive material (see, e.g., col. 2, lines 55-58). Moreover, Fan describes a process for making a flexographic printing plate that comprises: (1) image-

wise ablating layer (d) of the aforementioned element with infrared laser radiation to form a mask; (2) overall exposing the photosensitive element to actinic radiation through the mask; and (3) treating the product of step (2) with at least one developer solution to remove (i) infrared-sensitive material that was not removed during step (1), (ii) areas of the barrier layer that were not exposed to actinic radiation, and (iii) areas of the photopolymerizable layer (b) that were not exposed to actinic radiation (see, e.g., col. 2, lines 32-45).

The present invention, however, is not directed to a photosensitive printing element that comprises, in the following order, a support, a photopolymerizable layer, at least one barrier, and a layer of infrared radiation sensitive material. Nor is the present invention directed to the aforementioned process. Rather, the pending claims are directed to a method for on-site preparation of a relief image comprising the following steps: (a) laminating a material comprising, in the order given, a first peelable support, an image recording layer and an adhesive layer onto a UV-sensitive material comprising a support and a UV-sensitive layer, wherein the adhesive layer is laminated to the UV-sensitive layer; (b) image-wise exposing the image recording layer to form a mask; (c) flood exposing the UVsensitive material through the mask; (d) developing the UV-sensitive material; wherein the peelable support is removed either before step (b), (c) or (d) and wherein steps (a) to (d) are performed within a period of less than 2 months. There is simply no teaching or suggestion in Fan of laminating a material comprising, in the order given, a first peelable support, an image recording layer and an adhesive layer onto a UV-sensitive material comprising a support and a UV-sensitive layer, wherein the adhesive layer is laminated to the UVsensitive layer; (b) image-wise exposing the image recording layer to form a mask; (c) flood exposing the UV-sensitive material through the mask; (d) developing the UV-sensitive material; wherein the peelable support is removed either before step (b), (c) or (d), much less a teaching or suggestion of such a method wherein steps (a) to (d) are performed within a period of less than 2 months, as recited in the pending claims.

Moreover, Applicants respectfully point out that the adhesive layer recited in pending claim 20, which can be optimized to adhere optimally to the image-recording layer, does not have good barrier properties and cannot properly be considered to be a

barrier layer. Indeed, as stated in the instant specification, known adhesion layers have poor barrier properties (see page 3, line 11, of the instant specification).

Furthermore, claim 21 recites the additional feature that the UV-sensitive material further comprises an additional layer on top of the UV-sensitive layer and wherein the adhesive is laminated on top of the additional layer. Significantly, Fan does not disclose or fairly suggest having such an additional layer on top of a UV-sensitive layer, wherein adhesive is laminated on top of the additional layer.

Because Fan does not meet the features of the present pending claims, Fan does not anticipate those claims. Accordingly, the anticipation rejection with respect to claims 20, 21, 27-33, and 35-37 should be withdrawn.

Discussion of the Obviousness Rejections

The obviousness rejection with respect to claims 22-26 is predicated on Fan in combination with Lelental et al., and the obviousness rejection with respect to claims 34 and 38 is predicated on Fan in combination with Barzynski et al. The present invention (as recited in the pending claims), however, is quite different from Fan (as discussed above), and there is no suggestion in the Lelental et al. and Barzynski et al. references as to how to modify the Fan reference to achieve the present invention.

As discussed above, there is simply no teaching or suggestion in Fan of a method for on-site preparation of a relief image comprising the steps of: (a) laminating a material comprising, in the order given, a first peelable support, an image recording layer and an adhesive layer onto a UV-sensitive material comprising a support and a UV-sensitive layer, wherein the adhesive layer is laminated to the UV-sensitive layer; (b) image-wise exposing the image recording layer to form a mask; (c) flood exposing the UV-sensitive material through the mask; (d) developing the UV-sensitive material; wherein the peelable support is removed either before step (b), (c) or (d) and wherein steps (a) to (d) are performed within a period of less than 2 months, as recited in the pending claims.

Lelental et al. does not compensate for the deficiencies of Fan. Lelental et al. is directed to a multilayer imaging element that includes a support, one or more image-forming layers superposed on the support, and an outermost transparent, electrically-conductive, non-charging, overcoat layer superposed on the support (see, e.g., col. 5, lines

36-41). Although Lelental et al. discloses the use of imaging elements including, for example, "photographic, thermographic, electrothermographic, photothermographic, dielectric recording, dye migration, laser dye-ablation, thermal dye transfer, electrostatographic, and electrophotographic imaging elements" (see col. 12, lines 34-41, of Lelental et al.), there is no teaching or suggestion of the present inventive method recited in claim 20, much less a teaching or suggestion of the embodiments of this method recited in dependent claims 22-26 (or in any of the other dependent claims for that matter).

Barzynski et al. also does not compensate for the deficiencies of Fan. Barzynski et al. discloses a resist film comprising a dimensionally stable base (which is transparent to actinic light in the wavelength range from 300 to 420 nm) and a mask-forming layer which is applied to the base (wherein the mask-forming layer is sensitive to heat radiation and contains a thermochromic system which, when irradiated with an IR laser having a wavelength greater than 1.00 µm, undergoes an irreversible change in its absorption spectrum in the wavelength range from 300 to 420 nm so that the optical density of the mask-forming layer in this wavelength range changes by not less than 1.3 units) (see, e.g., col. 2, lines 5-16). Moreover, Barzynski et al. describes a process for the production of a photomask by imagewise irradiation of the resist film using an IR laser, and to a process for the production of relief images, wherein the mask-forming layer of a multilayer element comprising the resist film and a photosensitive recording material is first irradiated imagewise, using an IR laser, to form a photomask, wherein the photosensitive relief-forming layer is exposed to actinic light through the photomask, wherein the latter is removed from a photopolymeric relief-forming layer, and wherein the relief image is developed by washing out the relief-forming layer with a solvent (see col. 2, lines 22-33). Although Barzynski et al. discloses that the mask-forming thermochromic layer described therein can be removed, by peeling, from a photosensitive relief layer after exposure of the latter to actinic light and before development of a relief image (see col. 7, lines 59-63), there is no teaching or suggestion of the present inventive method recited in claim 20, much less a teaching or suggestion of the embodiments of this method recited in dependent claims 34 and 38 (or any of the other dependent claims for that matter).

Since none of the cited references (even when combined) discloses or reasonably suggests the present invention as defined by the pending claims, the present invention must be considered patentable over the cited references. Accordingly, the obviousness rejections should be withdrawn and the application indicated as allowable.

Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted

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